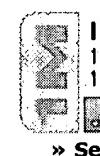


	Type	L #	Hits	Search Text	DBs
1	BRS	L2	207100	(identif\$9 or recog\$9 or detect\$3) with (road or lane or line)	USPAT
2	BRS	L3	35851	2 and (waveform or histogram)	USPAT
3	BRS	L4	2395	2 and ((waveform or histogram) same rotat\$8)	USPAT
4	BRS	L5	271	2 same ((waveform or histogram) same rotat\$8)	USPAT
5	BRS	L6	245	2 same ((waveform or histogram) same rotat\$8)	USPAT
6	BRS	L7	173202	(identif\$9 or recog\$9 or detect\$3) with (road or lane or line)	USPAT
7	BRS	L8	197626	(track\$3 or identif\$9 or recog\$9 or detect\$3) with (road or lane or line)	USPAT
8	BRS	L9	479	8 same histogram	USPAT
9	BRS	L10	30	8 same (histogram same (rotat\$3 or hough))	USPAT
10	BRS	L11	7554	(track\$3 or identif\$9 or recog\$9 or detect\$3) with (road or lane or line)	EPO
11	BRS	L12	0	11 same (histogram same (rotat\$3 or hough))	EPO
12	BRS	L13	9	11 same histogram	EPO
13	BRS	L14	65659	(track\$3 or identif\$9 or recog\$9 or detect\$3) with (road or lane or line)	DERWENT
14	BRS	L15	74	14 same histogram	DERWENT
15	BRS	L16	79632	(track\$3 or identif\$9 or recog\$9 or detect\$3) with (road or lane or line)	JPO
16	BRS	L17	0	16 same histogram	DERWENT
17	BRS	L18	0	16 and histogram	DERWENT
18	BRS	L19	192	16 and histogram	JPO
19	BRS	L20	6	16 same (histogram same (rotat\$3 or hough))	JPO

	Type	L #	Hits	Search Text	DBs
1	BRS	L1	16442	(track\$3 or recog\$8 or identif\$6) same (road or lane)	USPAT
2	BRS	L2	28	1 same histogram	USPAT
3	BRS	L3	2	1 same histogram same (rotat\$3 or hough)	USPAT
4	BRS	L4	16	1 and (histogram same (rotat\$3 or hough))	USPAT
5	BRS	L5	12	1 and (histogram same hough)	USPAT



Membership Publications/Services Standards Conferences Careers/Jobs

**IEEE Xplore®**  
 RELEASE 1.8

 Welcome  
 United States Patent and Trademark Office

Help FAQ Terms IEEE Peer Review Quick Links

**Welcome to IEEE Xplore®**

- Home
- What Can I Access?
- Log-out

**Tables of Contents**

- Journals & Magazines
- Conference Proceedings
- Standards

**Search**

- By Author
- Basic
- Advanced
- CrossRef

**Member Services**

- Join IEEE
- Establish IEEE Web Account
- Access the IEEE Member Digital Library

**IEEE Enterprise**

- Access the IEEE Enterprise File Cabinet

Print Format

Your search matched **10** of **1123491** documents.A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance Descending** order.**Refine This Search:**

You may refine your search by editing the current search expression or enter a new one in the text box.

(track\* or identif\* or recog\*) &lt;paragraph&gt; (road\* or

 Check to search within this result set**Results Key:****JNL** = Journal or Magazine   **CNF** = Conference   **STD** = Standard**1 A parallel systolic array ASIC for real-time execution of the Hough transform**

*Epstein, A.; Paul, G.U.; Vettermann, B.; Boulin, C.; Klefenz, F.;*  
*Nuclear Science, IEEE Transactions on , Volume: 49 , Issue: 2 , April 2002*  
*Pages:339 - 346*

[\[Abstract\]](#) [\[PDF Full-Text \(306 KB\)\]](#) **IEEE JNL**
**2 Adaptive linear feature detection based on beamlet**

*Qin-Feng Shi; Yan-Ning Zhang;*  
*Machine Learning and Cybernetics, 2004. Proceedings of 2004 International Conference on , Volume: 7 , 26-29 Aug. 2004*  
*Pages:3981 - 3984 vol.7*

[\[Abstract\]](#) [\[PDF Full-Text \(616 KB\)\]](#) **IEEE CNF**
**3 Applying morphological filters to acoustic broadband correlograms**

*Haw-Jye Shyu;*  
*Systems, Man, and Cybernetics, 1997. 'Computational Cybernetics and Simulation'., 1997 IEEE International Conference on , Volume: 5 , 12-15 Oct.*

Pages:4182 - 4187 vol.5

[\[Abstract\]](#) [\[PDF Full-Text \(624 KB\)\]](#) **IEEE CNF**
**4 Skew detection in handwritten scripts**

*Chin, W.; Harvey, A.; Jennings, A.;*  
*TENCON '97. IEEE Region 10 Annual Conference. Speech and Image Technology for Computing and Telecommunications'., Proceedings of IEEE , Volume: 1 , 2 Dec. 1997*

Pages:319 - 322 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(236 KB\)\]](#) [IEEE CNF](#)

---

**5 Laser radar based real-time ego-motion estimation for intelligent vehicles**

*Ming Yang; Bin Dong; Hong Wang; Bo Zhang;*

Intelligent Vehicle Symposium, 2002. IEEE , Volume: 1 , 17-21 June 2002

Pages:44 - 51 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(535 KB\)\]](#) [IEEE CNF](#)

---

**6 A rotation invariant approach on static-gesture recognition using boundary histograms and neural networks**

*Wysoski, S.G.; Lamar, M.V.; Kuroyanagi, S.; Iwata, A.;*

Neural Information Processing, 2002. ICONIP '02. Proceedings of the 9th International Conference on , Volume: 4 , 18-22 Nov. 2002

Pages:2137 - 2141 vol.4

[\[Abstract\]](#) [\[PDF Full-Text \(420 KB\)\]](#) [IEEE CNF](#)

---

**7 Indexing of technical line drawings based on F-signatures**

*Tabbone, S.; Wendling, L.; Tombre, K.;*

Document Analysis and Recognition, 2001. Proceedings. Sixth International Conference on , 10-13 Sept. 2001

Pages:1220 - 1224

[\[Abstract\]](#) [\[PDF Full-Text \(288 KB\)\]](#) [IEEE CNF](#)

---

**8 Interfered-character recognition by removing interfering-lines and adjusting feature weights**

*Yi-Hong Tseng; Hsi-Jian Lee;*

Pattern Recognition, 1998. Proceedings. Fourteenth International Conference on , Volume: 2 , 16-20 Aug. 1998

Pages:1865 - 1867 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(60 KB\)\]](#) [IEEE CNF](#)

---

**9 Detecting corners using the 'patchy' Hough transform**

*Christopher, R.J.; Gregson, P.H.;*

Electrical and Computer Engineering, 1994. Conference Proceedings. 1994 Canadian Conference on , 25-28 Sept. 1994

Pages:576 - 579 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(228 KB\)\]](#) [IEEE CNF](#)

---

**10 A neural network shape recognition system with Hough transform feature space**

*Chan, C.K.; Sandler, M.B.;*

Image Processing and its Applications, 1992., International Conference on , 7 Apr 1992

Pages:197 - 200

File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire  
File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc  
File 587:Jane's Defense&Aerospace 2005/Jan W1  
(c) 2005 Jane's Information Group

Set	Items	Description
S1	43692	(ROADWAY OR ROAD()WAY? OR STREET?? OR HIGHWAY??) (5N) (VIDEO OR IMAGE?? OR PICTURE? OR CCD OR CAMERA???)
S2	107	S1(3N) FRAME??
S3	4341	(MULTIPLE OR MANY OR MULTI OR SEVERAL OR NUMEROUS OR PLURA- L?) (3N) (PIXEL?? OR PEL OR PICTURE()ELEMENT?)
S4	15744	HISTOGRAM?
S5	3	PROJECTION(3N) (WAVEFORM? OR WAVE() FORM??)
S6	15255519	LINE??
S7	23032	S6(5N) (BROKEN OR PERIODIC OR SPACED OR SPACING)
S8	7	LUMINANCE(S) HUE(S) SATURATION(S) DIRECTION(S) (VELOCITY OR SP- EED)
S9	11128	ROTAT?(3N) (AXIS OR XY OR X()Y OR ORTHOGON? OR ORIENTATION? OR AXES)
S10	243	HOUGH() TRANSFORM?
S11	352256	HORIZONTAL?
S12	868917	VERTICAL?
S13	281985	(INDICAT? OR REPRESENT? OR CHARACTERISTIC? OR IDENTIF? OR - CORRESPOND? OR RELAT? OR MATCH?) (3N) S6
S14	188	PARALLEL(5N) DOUBLE(5N) (S6 OR LANE??)
S15	203415	(IDENTIF? OR DETERMIN? OR DETECT? OR TRACK? OR LOCAT?) (3N)- (VEHICLE?? OR CARS OR CAR OR AUTOMOBILE?? OR TRUCK?? OR HEADL- IGHT? OR HEAD()LIGHT?? OR (TAIL OR REAR) ()LIGHT?? OR TAILLIGH- T??)
S16	13	AU=(PIRIM, P? OR BINFORD, T? OR PIRIM P? OR BINFORD T?)
S17	0	(TIME OR DURATION) (3N) S2
S18	0	S2(S) S3
S19	0	S1(S) (S4 OR S5 OR S10)
S20	29	S3(S) (S4 OR S5 OR S10)
S21	3	S20(S) S6
S22	2	RD S21 (unique items)
S23	0	S20(S) S15
S24	4	S3(S) (S13 OR S14 OR S15)
S25	4	S24 NOT S21
S26	4	RD S25 (unique items)
S27	0	S3(S) S9
S28	4	S16 AND (S6 OR S15)
S29	2	RD S28 (unique items)

File 348:EUROPEAN PATENTS 1978-2005/Jan W02

(c) 2005 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20050113,UT=20050106

(c) 2005 WIPO/Univentio

Set	Items	Description
S1	510	(ROADWAY OR ROAD()WAY? OR STREET?? OR HIGHWAY???) (5N) (VIDEO OR IMAGE?? OR PICTURE? OR CCD OR CAMERA??)
S2	8	S1(3N)FRAME??
S3	14495	(MULTIPLE OR MANY OR MULTI OR SEVERAL OR NUMEROUS OR PLURA- L?) (3N) (PIXEL?? OR PEL OR PICTURE()ELEMENT?)
S4	12905	HISTOGRAM?
S5	38	PROJECTION(3N) (WAVEFORM? OR WAVE() FORM??)
S6	990065	LINE??
S7	63235	S6(5N) (BROKEN OR PERIODIC OR SPACED OR SPACING)
S8	7	LUMINANCE(S)HUE(S)SATURATION(S)DIRECTION(S) (VELOCITY OR SP- EED)
S9	115617	ROTAT?(3N) (AXIS OR XY OR X()Y OR ORTHOGON? OR ORIENTATION? OR AXES)
S10	385	HOUGH()TRANSFORM?
S11	354642	HORIZONTAL?
S12	402727	VERTICAL?
S13	204324	(INDICAT? OR REPRESENT? OR CHARACTERISTIC? OR IDENTIF? OR - CORRESPOND? OR RELAT? OR MATCH?) (3N)S6
S14	277	PARALLEL(5N)DOUBLE(5N)(S6 OR LANE??)
S15	30993	(IDENTIF? OR DETERMIN? OR DETECT? OR TRACK? OR LOCAT?) (3N)- (VEHICLE?? OR CARS OR CAR OR AUTOMOBILE?? OR TRUCK?? OR HEADL- IGHT? OR HEAD()LIGHT?? OR (TAIL OR REAR)()LIGHT?? OR TAILLIGHT- T???)
S16	27	AU=(PIRIM, P? OR BINFORD, T? OR PIRIM P? OR BINFORD T?)
S17	0	(TIME OR DURATION) (3N)S2
S18	25319	IC=G06K?
S19	0	S16 AND S1
S20	6	S16 AND S3
S21	1	S20 NOT PY=>2000
S22	8	S15 AND S16
S23	7	S22 NOT S21
S24	0	S2(S)S3
S25	1	S2 AND S18
S26	1	S25 NOT (S22 OR S21)
S27	3	S8 AND S18
S28	1	S27 NOT (S25 OR S22 OR S21)
S29	0	S28 NOT FACE
S30	3	S1(S)S3
S31	2	S30 NOT (S25 OR S22 OR S21)
S32	14	S1(S)(S4 OR S5 OR S9 OR S10)
S33	11	S32(S)S6
S34	11	S33 NOT (S30 OR S25 OR S22 OR S21)
S35	2	S34 NOT PY=>2000
S36	2	IDPAT (sorted in duplicate/non-duplicate order)
S37	2	IDPAT (primary/non-duplicate records only)
S38	64	S1(S)S15
S39	1	S38(S)S9
S40	0	S39 NOT (S33 OR S30 OR S25 OR S22 OR S21) (S13 OR S14 OR S7)(S)S3
S41	745	S41(S)(S4 OR S5 OR S9 OR S10 OR S11 OR S12)
S42	187	S42 AND S18
S43	27	S43 NOT PY=>2000
S44	14	S44 NOT (S33 OR S30 OR S25 OR S22 OR S21)
S45	13	IDPAT (sorted in duplicate/non-duplicate order)
S46	13	

S47

12 IDPAT (primary/non-duplicate records only)

File 344:Chinese Patents Abs Aug 1985-2004/May  
 (c) 2004 European Patent Office  
 File 347:JAPIO Nov 1976-2004/Aug(Updated 041203)  
 (c) 2004 JPO & JAPIO  
 File 350:Derwent WPIX 1963-2005/UD,UM &UP=200504  
 (c) 2005 Thomson Derwent

Set	Items	Description
S1	1285	(ROADWAY OR ROAD()WAY? OR STREET?? OR HIGHWAY??) AND (VIDEO OR IMAGE?? OR PICTURE? OR CCD OR CAMERA??)
S2	64	S1 AND FRAME??
S3	12764	(MULTIPLE OR MANY OR MULTI OR SEVERAL OR NUMEROUS OR PLURA- L?) (3N) (PIXEL?? OR PEL OR PICTURE()ELEMENT?)
S4	7039	HISTOGRAM?
S5	87	PROJECTION(3N) (WAVEFORM? OR WAVE() FORM??)
S6	1801261	LINE??
S7	73928	S6 AND (BROKEN OR PERIODIC OR SPACED OR SPACING)
S8	1	LUMINANCE AND HUE AND SATURATION AND DIRECTION AND (VELOCI- TY OR SPEED)
S9	331289	ROTAT? AND (AXIS OR XY OR X()Y OR ORTHOGON? OR ORIENTATION? OR AXES)
S10	286	HOUGH() TRANSFORM?
S11	638222	HORIZONTAL?
S12	956631	VERTICAL?
S13	80698	(INDICAT? OR REPRESENT? OR CHARACTERISTIC? OR IDENTIF? OR - CORRESPOND? OR RELAT? OR MATCH?) (3N) S6
S14	3502	PARALLEL AND DOUBLE AND (S6 OR LANE??)
S15	332926	(IDENTIF? OR DETERMIN? OR DETECT? OR TRACK? OR LOCAT?) AND (VEHICLE?? OR CARS OR CAR OR AUTOMOBILE?? OR TRUCK?? OR HEADL- IGHT? OR HEAD()LIGHT?? OR (TAIL OR REAR) ()LIGHT?? OR TAILLIGH- T???)
S16	19	AU=(PIRIM, P? OR BINFORD, T? OR PIRIM P? OR BINFORD T?)
S17	17	(TIME OR DURATION) AND S2
S18	190350	IC=G06K?
S19	0	S2 AND (S4 OR S5 OR S10)
S20	93	S3 AND (S4 OR S5 OR S10)
S21	0	S20 AND S1
S22	7	S20 AND S15
S23	4	S22 NOT PY=>2000
S24	0	S3 AND S9 AND S10
S25	55	S3 AND S9
S26	3	S25 AND S11 AND S12
S27	3	S26 NOT S22
S28	3	S27 NOT PY=>2000
S29	355	(S13 OR S15) AND S1
S30	2	S29 AND S3
S31	2	S30 NOT (S26 OR S22)
S32	0	S14 AND S10
S33	287	S14 AND S9
S34	0	S33 AND S3
S35	0	S33 AND (S10 OR S5 OR S4)
S36	0	S33 AND S18
S37	10	S16 AND (S10 OR S4 OR S5)
S38	1	S37 NOT PY=>2000
S39	0	S17 AND (S10 OR S4 OR S5)
S40	132	S7 AND S3
S41	2	S40 AND S9
S42	2	S41 NOT (S30 OR S26 OR S22)
S43	2	S42 NOT PY=>2000
S44	21	S20 AND S6

S45        8     S44 AND (PARALLEL OR DOUBLE OR TWO)  
S46        13    S44 NOT S45  
S47        7     S45 NOT (S41 OR S30 OR S26 OR S22)  
S48        11    S46 NOT (S41 OR S30 OR S26 OR S22)